

***Remarks***

Reconsideration of rejected claims 1-30 is respectfully requested.

In the Office action dated May 7, 2003 (application Paper No. 3), the objected to the Oath/Declaration, the Priority assertion in the specification, and the drawings. The claims were rejected under 35 USC §§ 102(e) and 103(a). The Examiner's objections and rejections will be discussed below in the order appearing in the Office action.

***Objection to the Oath***

The Examiner first objected to the oath in that "no claims to priority have been made" to various applications cited in the specification. A re-executed oath is being obtained and will be forwarded to the Examiner upon its receipt.

***Priority***

The Examiner next stated that the "applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date", where the original specification had claimed priority from Serial No. 08/074,851 (now patent 5,504,305). In fact, this priority claim included a typographical error, which has now been corrected as noted above. The actual priority document is 09/074,851, which has now issued as US Patent 6,321,384.

***Drawing Objection***

The drawings were next cited by the Examiner as not containing a number of reference numerals and also containing reference numerals not found in the description. In response to this objection, applicants are supplying corrected drawings which now correspond to the text as submitted.

***35 USC § 102(e) Rejection - Claims 1m 3-5, 7 and 13-30***

The above-cited claims were first rejected by the Examiner under 35 USC 102(e) as being anticipated by US Patent 6,385,773 (Schwartzman). In particular, the Examiner cited Schwartzman as teaching "a system and method for switching frequencies in the

presence of ingress noise”, where Schwartzman at column 9, lines 59-62 is cited as teaching “marking the frequency band and time interval ‘in which the ingress events exceeds a predetermined threshold’” and the “claimed creation of a time/frequency map of the ingress events containing results of times and frequencies above a pre-determined threshold” is cited by the Examiner as taught at column 12, beginning at line 41 of Schwartzman.

In response, applicants assert that Schwartzman does not disclose or suggest an arrangement that simultaneously evaluates “ingress” noise as a function of both “frequency” and “time” so as to generate a map including both aspects. Such is necessary, in accordance with the present invention, to separately define “narrowband” ingress and “wideband” ingress. Schwartzman, at the cited portions of the text selected by the Examiner, describes using an FFT process to map data as a function of frequency. Since an FFT is used to transform between either a time domain process or a frequency domain process, it is asserted that both types of data are not simultaneously considered in Schwartzman. Indeed, Schwartzman is directed to the problem of ingress noise at a particular frequency band, with the solution of switching to another frequency channel when the noise reaches a threshold. The concept of evaluating all of the frequency bands during a particular slice of time is not considered in the Schwartzman arrangement.

Without this teaching, applicants assert that Schwartzman cannot be found to disclose or suggest the arrangement of the present invention which requires “marking” both a frequency band *and* a time interval associated with each ingress event and then generating a time/frequency map to evaluate the presence of these events. Applicants therefore respectfully request the Examiner to reconsider this rejection and find claims 1, 3-5, 7 and 13-30 to be in condition for allowance.

### ***35 USC § 103(a) Rejection - Claims 2 and 8-12***

Claims 2 and 8-12 were next rejected by the Examiner under 35 USC 103(a) as being unpatentable over Schwartzman (as above). Without the teaching of providing both time-based and frequency-based ingress noise information, applicants assert that Schwartzman cannot be found to render obvious the subject matter of the present invention. In particular with reference to claims 10 and 11, which define a particular

embodiment of the present invention wherein “ingress events” (occurring at a particular frequency) are summed “across a plurality of time intervals” to determine the noise characteristics, the Examiner states that “the claimed summing results across a plurality of time intervals within a specific frequency band is not explicitly taught by Schwartzman”. The Examiner states that Schwartzman does disclose the use of FFTs to perform frequency analysis and asserts that the utilization of FFTs in either the frequency or time domain renders obvious the “summing” as a function of time as taught by claims 10 and 11.

As discussed above, applicants assert that the intent of the present invention is to create a map including both time and frequency information, allowing one to simultaneously generate “ingress event” results as a function of both time and frequency. In the case of Schwartzman, only frequency information is generated. This information can then be transformed into the time domain (using an IFFT process), but the frequency information is lost. The purpose of the present invention is to retain both types of information and use them simultaneously to characterize the ingress noise.

In light of this difference, applicants assert that Schwartzman cannot be found to render obvious the subject matter of the present invention as defined by claims 2 and 8-12. Applicants therefore respectfully request the Examiner to reconsider this rejection and find claims 2 and 8-12 to be in condition for allowance.

### ***35 USC § 103(a) Rejection - Claim 6***

Lastly, the Examiner rejected claim 6 under 35 USC 103(a) as unpatentable over Schwartzman (as above), in further view of US Patent 4,520,508 (Reichert, Jr.), which was cited by the Examiner as teaching “isolation” of the return signal path to mitigate the presence of ingress noise. With reference to applicants’ specification at page 7, an attenuator/switch 203 “is used in the RF module 200 to attenuate or remove return path signals when ingress from that location is determined to be unacceptable”. Claim 6 has been amended to use the term --remove-- instead of “isolate”. The Reichert, Jr. reference cited by the Examiner utilizes the term “isolate” to mean “locate the source of” a particular ingress event. The subject matter of claim 6 is directed to literally removing a

return path that is too noisy. Such attenuation/removal is not disclosed or suggested by Reichert, Jr.

In light of this amendment to claim 6, applicants respectfully request the Examiner to reconsider this rejection and find claim 6 to be in condition for allowance.

***Summary***

The present application contains claims 1-30, where various claims have been amended to overcome the Examiner's rejections, and the drawings and specification have been amended to overcome the Examiner's objections. Applicants believe that the case, in its present form, is now in condition for allowance and respectfully request an early and favorable response from the Examiner in that regard. If for some reason or other the Examiner does not agree that the case is ready to issue and that an interview or telephone conversation would further the prosecution, the Examiner is invited to contact applicants' attorney at the telephone number listed below.

Respectfully submitted,

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